Lecture Outline (CS 303, Dong Xu, 2/18/04)

• Things to start…
  – Discussion on the quiz
  – Other questions?

• Outline
  – Description of quicksort (7.1)
  – Performance of quicksort (7.2)
• Description of quicksort
  – Divide-and-conquer idea
  – Pseudo code
  – Example
  – Loop invariant

• Performance of quicksort
  – Worst case
  – Best case
  – Balanced
  – Intuition for average case
• **Reading**
  - Chapter 7.1
  - Chapter 7.2

• **Homework**
  - Ex. 7.1-1, 7.1-2
  - Ex. 7.2-2, 7.2-3, 7.2-5